



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/537,043

01/17/2006

Weiliang Lian

6246-000004/US/NP

1313

23409 7590 08/03/2009
MICHAEL BEST & FRIEDRICH LLP
100 E WISCONSIN AVENUE
Suite 3300
MILWAUKEE, WI 53202

EXAMINER

TESHALE, AKELAW

ART UNIT

PAPER NUMBER

2614

MAIL DATE

DELIVERY MODE

08/03/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/537,043	Applicant(s) LIAN ET AL.	
	Examiner AKELAW A. TESHAE	Art Unit 2614	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 May 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 01 June 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>06/29/2009</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1. This action is response to communication filed on **05/04/2009**.
2. Claims **1-20** are pending in this action.
3. This Action is Non-Final.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. **Claims 1-20** are rejected under 35 U.S.C. 103(a) as being unpatentable over Finkelstein et al (The Future of Intelligent Network) in view of U.S Patent 6,968,051 B1 to Wood.

As to **claim 1**, Finkelstein discloses a Softswitch for a next generation Network (**see fig.4, the call agent is the softswitch and under Voice-Over-Packet Network see lines 22 and 25**); a network adaptive device for implementing the communication between the Softswitch and other devices in said network, as well as receiving call requests (**see fig.4 and under the intelligent network lines 15-18, the SSF and the CCF are the network**

Art Unit: 2614

adaptive device they do the typical call connection between the switch and other devices and handle call request); a call server for processing the common call **(see fig.4 and under the intelligent network lines 12-24, the SCF is the call server and is consulted for instructions by the network adaptive device for instructions therefore he will process the common calls);** and an intelligent Network Application Part (INAP), Customized Applications for Mobile network Enhanced Logic Application part (CAP) or Mobile Application Part (MAP) adapter for responding the call of the intelligent network and encoding or decoding the INAP message **(see under Voice-Over-Packet Network lines 35-46, the IN capabilities can be access using SS7/ TCAP therefore INAP which is layer on top of the TCAP).**

Finkelstein does not explicitly teach a server determining whether the call received is a common call or a call of IN.

Wood teaches service switching point (SSP) determining whether the call received is a basic call or a call of IN (column 42-65 ;SSP includes a software to facilitate basic call control and the added functionality to support intelligent network service, SSP is configured to separate basic calls from intelligent network based-calls as arrive at the switch).

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to modify Finkelstein's teaching with service switching point (SSP) determining whether the call received is a common call or a call of IN as taught by Wood.

The suggestion/motivation would have been in order to separate basic calls from intelligent calls as arrive at the switch and process the call based on the identified event.

As to **claim 6**, Finkelstein discloses a system for implementing an intelligent network, including: a Softswitch device, the system comprising: a network adaptive device for implementing communication between the Softswitch device and other devices in said network, as well as receiving the call request (**see fig.4 and under the intelligent network lines 15-18, the SSF and the CCF are the network adaptive device they do the typical call connection between the switch and other devices and handle call request**); a call server for processing the common call (**see fig.4 and under the intelligent network lines 12-24, the SCF is the call server and is consulted for instructions by the network adaptive device for instructions therefore he will process the common calls**); an INAP adapter for responding to the call of the intelligent network and encoding/decoding the INAP message (**see under Voice-Over-Packet Network lines 35-46, the IN capabilities can be access using SS7/ TCAP therefore INAP which is layer on top of the TCAP**); at least one Service Control Point (SCP) for executing intelligent service logic and producing INAP messages (**see fig.4, there is and SCP in the PSTN side**); and an IP network for connecting said Softswitch device and the SCP (**see under Voice-**

Over-Packet Network lines 43-46).

Finkelstein does not explicitly teach a server determining whether the call received is a basic call or a call of IN.

Wood teaches service switching point (SSP) determining whether the call received is a basic call or a call of IN (column 42-65 ;SSP includes a software to facilitate basic call control and the added functionality to support intelligent network service, SSP is configured to separate basic calls from intelligent network based-calls as arrive at the switch).

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to modify Finkelstein's teaching with service switching point (SSP) determining whether the call received is a common call or a call of IN as taught by Wood.

The suggestion/motivation would have been in order to separate basic calls from intelligent calls as arrive at the switch and process the call based on the identified event.

As to **claim 9**, Finkelstein discloses a method for a PSTN telephone to access into an intelligent network service in a next generation network (**see introduction lines 37-40**), wherein there is at least one SCP in said next generation network for executing the intelligent service logic, said method including (**see fig.4, the call agent**

Art Unit: 2614

is the SCP in the packet network, NGN); issuing a call request from said PSTN telephone through dialing an accessing code (**see Specialized Resources lines 3-8, access web content via standard telephone connection therefore a call request using an access code**); transforming said call request issued by said PSTN telephone into a protocol format suitable for the next generation network (see Specialized Resources lines 3-8, accessing the web is a service from PSTN to NGN that requires a protocol suitable for the NGN); determining whether said call request is an intelligent network service provided by the SCP (**see under Voice-Over-Packet Network lines 35-40, the call agent support limited SCF capabilities to process service request therefore there is a way to determine if the service can be provided by the SCP**); if said call request is an intelligent network service provided by the SCP, encoding said-call request into an INAP message and transferring the message to said SCP (**see under Voice-Over-Packet Network lines 35-46, the SCP only communicates through TCAP, INAP is in the top layer of the TCAP protocol, therefore call request are encoded into INAP messages**); and responding said INAP message and processing said call request by said SCP (**see under Voice-Over-Packet Network lines 35-46, the SCP communicates with the signaling gateway to access a service of the IN therefore the gateway will respond said INAP message and will process the call request by the SCP**).

Art Unit: 2614

Finkelstein does not explicitly teach determining whether said call request is an intelligent network service provides by the SCP or not.

Wood teaches determining whether said call request is an intelligent network service provides by the SCP or not (column 42-65).

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to modify Finkelstein's teaching with determining whether said call request is an intelligent network service provides by the SCP or not as taught by Wood.

The suggestion/motivation would have been in order to separate basic calls from intelligent calls as arrive at the switch and process the call based on the identified event.

As to claims 13 and 17, Finkelstein discloses a method for a telephone in a next generation network to access into an intelligent network service in a PSTN network (**see title of fig.4, inter working of PSTN with VOIP therefore calls from one network to the other**), herein there is at least one SCP in said PSTN network for executing the intelligent service logics (**see fig.4, there is one SCP in the PSTN side**); issuing a call request from said telephone in said next generation network through dialing an accessing code (**see under Voice-Over-Packet Network lines 35-40, process service request for IN capabilities in the PSTN ,i.e. toll-free numbers, therefore a call request from the telephone accessing a code**); determining whether said call request is an intelligent network service provided by the SCP or not (**see under Voice-Over-Packet**

Network lines 35-40); if said call request is an intelligent network service provided by the SCP, encoding said call request into an INAP message; transforming said INAP message *into* a format suitable for the PSTN network and transferring said INAP message to said SCP (**see under Voice-Over-Packet Network lines 35-46, the SCP only communicates through TCAP, INAP is in the top layer of the TCAP protocol, therefore call request are encoded into INAP messages**); and responding said INAP message and processing said call request by said SCP (**see under Voice-Over-Packet Network lines 35-46, the SCP communicates with the signaling gateway to access a service of the IN therefore the gateway will respond said INAP message and will process the call request by the SCP**).

Finkelstein does not explicitly teach determining whether said call request is an intelligent network service provides by the SCP or not.

Wood teaches determining whether said call request is an intelligent network service provides by the SCP or not (column 42-65).

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to modify Finkelstein's teaching with determining whether said call request is an intelligent network service provides by the SCP or not as taught by Wood.

The suggestion/motivation would have been in order to separate basic calls from intelligent calls as arrive at the switch and process the call based on the identified event.

As to **claim 2**, Finkelstein discloses that said Softswitch further includes: a resource manager for managing intelligent peripherals, performing audio interaction with a user through the call server, and transmitting the user input data to said INAP adapter (see Voice-Over-Packet Network lines 35-40, the call agent (softswitch) support limited SCF capabilities to process service request ,and access IN capabilities in the PSTN therefore a resource manager for managing intelligent peripherals and see under The Intelligent Network lines 25-27, the IN can use special equipment to play announcement and collect user information and since all these functionality is done through the resource manager the user input data is transmitted to the INAP adapter).

As to **claim 3**, Finkelstein discloses characterized in that said Softswitch further includes: a signaling transmitting adapter for transferring signaling data through IP packets (see fig.4 and under Voice-Over-Packet Network lines 22-25, the fig.4 shows a signaling gateway coming from the PSTN network and since the softswitch controls the packet back bone network there is a signaling transmitter adaptor for transferring signaling data through IP packets); and a media gateway control adapter for transmitting data between said Softswitch and one or more media gateways in said network (see under Voice-Over-Packet Network lines 35 and 36 the softswitch controls various gateways therefore a media gateway control adapter).

As to **claim 4**, Finkelstein discloses wherein the softswitch characterized

in that the media gateway control adapter uses one or more of the following protocols: H.323, MGCP, H.248 and SIP (see under Voice-Over-Packet Network lines 47-57).

As to **claim 5**, Finkelstein discloses wherein the softswitch characterized in that said network adaptive device includes: an INAP/TCP interface for directly transmitting an expanded INAP encoded message through TCP/IP protocol (see under Voice-Over-Packet Network lines 35-57).

As to **claim 7**, Finkelstein discloses characterized in that said system further includes: intelligent peripherals for providing special resources required by the intelligent network services (see under The Intelligent Network lines 25-32); and Said Softswitch device further includes: a resource manager for managing said intelligent peripherals, performing audio interaction with a user .through the call server, and transmitting the user input data to said INAP adapter (see Voice-Over-Packet Network lines 35-46).

As to **claim 8**, Finkelstein discloses a signaling gateway, connecting to said IP network at its one side and to a Public Switched Telephone Network (PSTN) at another side, for transferring signaling data between said IP network and said PSTN (see fig.4); a media gateway, connecting to said IP network at its one side and to a PSTN at another side, for transferring media data between said IP network and said PSTN (see fig.4); said Softswitch

device further including : a signaling transmitting adapter for transferring signaling data through IP packets; and a media gateway control adapter for transmitting data between said Softswitch and one or more media gateways in said network (see Voice-Over-Packet Network lines 35-36, controlling various gateways therefore a controller and a signaling adapter).

As to **claims 10 and 19**, Finkelstein discloses wherein that said step for transforming the call request includes: transforming the call request in SS7 signaling format into a format suitable for transmitting on the IP network (see fig.4, a signaling gateway therefore means for transforming ss7 signaling to IP format).

As to **claims 11 and 20**, Finkelstein discloses wherein that said step for transforming the call request includes: transforming the call request in SS7 signaling format into the SIGTRAN protocol format or H.248 protocol format (see Voice-over-Packet Network lines 55-57, Megaco/H.248).

As to **claims 12, 14 and 18**, Finkelstein discloses that said step for determining includes: searching a database that stores the accessing codes of the intelligent network, determining whether the accessing code of the call request of said PSTN telephone is an accessing code of the intelligent network (see under Next-Generation Network).

As to **claim 15**, Finkelstein discloses that said step for transforming includes: transforming the INAP message data in 1P network format into a format suitable for the PSTN network (see Voice-Over-Packet Network lines 35-46).

As to **claim 16**, Finkelstein discloses that said step for transforming includes: transforming the INAP message data in the SIGTRAN protocol format or H.248 protocol format into the SS7 signaling format (see Voice-Over-Packet Network lines 35-57).

Response to Arguments

6. Applicant's arguments with respect to **claims 1-20** have been considered but are moot in view of the new ground(s) of rejection.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to AKELAW A. TESHAE whose telephone number is (571)270-5302. The examiner can normally be reached on M-F 8:00am-5:00 Pm ET.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, FAN TSANG can be reached on (571)272-7547. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2614

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Akelaw A Teshale/
Examiner, Art Unit 2614

/Simon Sing/
Primary Examiner, Art Unit 2614